MAN AND DOLPHIN

a film script by

Ted Nelson

based on the book by

JOHN C. LILLY

and the filmsx on hand.

29 January 1963

Asterisk indicates:
uncertainty as to fact,
or
shots and sequences we don'tx have.

NARRATION (and sound, in parentheses)	PICTURE
	We see a faint spot in the upper right.
(We hear the sound of water ripplings slowly in the tank.)	
	A beam of light searches out the spot. It is the eye of the Old Bull, and a green glint comes from the tapetum. The animal rises to breathe.
(Gasp!)	
	Angle changes, camera comes slightly closer. Screen still mostly dark.
(Water is the only sound for ten seconds more, except the slight gasp when the animal breathes.)	
(Ripple sound coincides with change of shot.)	Repeat of first shot, but at greater length.
	In white, dignified lettering, the titles fade in over it:
	X FILMS PRESENT
	Fade out. Slight pause. Fade in:
	MAN AND DOLPHIN
	Title fades. Beam of light moves. Animal breathes. Fade in:
	Filmed at the COMMUNICATION RESEARCH INSTITUTE
(Music begins.)	Fade in below that:
	St. Thomas, V.I. Miami, Fla.

Fade titles. Fade in:

Written and directed by
Ted Nelson

(Surreptitious music continues.)

Fade in below that:

Based on the book by
JOHN C. LILLY

Fade out. Fade in photography credits; etcetera credits, thanking armed services and NIH, Seqquarium; copyright, etc. All fade out.

(Music ends.)

(More sounds of ripple and breathing.)

A closeup of Old Bull's eye, in orange light, lookingx around.

(In an FM style of announcing, the narration begins:)

This is the eye of a living creature.

It is the eye of a cetacean.

The cetaceans are an order of mammal.

The big cetaceans are called whales. This is a little one, about seven feet long, called a dolphin.

This dolphin is in a laboratory.

MS Old Bull, atx anx angle, bathed in orange light, staring carefully, inscrutably at the camera.

Dolphins were first kept in captivity in 1914. At that time it was said that the eye of the dolphin cannot move.

Closeup of the eye, moving.

The eye looks all around, and can bex seen to draw back into the head.

Now we know differently. Not only can the dolphin move his eyes, but he can (sound of gasp) move them separately to x look at one thing

with the left and another with
the right.

But the two eyes can also converge
to look together at objects that
(reads in time to movement) are
below, above, ahead, behind.
The dolphin xxx can look at his
tail without turning his head.
And his eyes can be drawn back
into the head, to compensate
for water pressure.

This is the dolphin, a fantastic
creature. What we don't know
about him yet will fill book after
book. We have just gotten him
into the laboratory. *Fade to black.

(Up music, for a moment.)

(Female narrator:)
There is every reason to call this
animal a dolphin. That has been
its name since antiquity. *On a black background,
Greek coin appears from side;
positions itself on screenn, grows.
Picture of dolphin.

For thousands of years, as the
vessels of xxxxxx civilizations
big and little have sailed across
the seas, dolphins have been curios-
ity seekers around the ships, and
friends-- playmates-- almostx ship-
mates to the x sailor. Sailors have
always called them good luck. *Succession of objets d'art
To the Greeks, dolphins were showing dolphins.
gods. Delphis, where the
Delphic oracle sat, xxxxx
meant "dolphin." The dolphin
remained x a symbol for wisdom
during the Middle Ages and Renais-
sance. He was a printer's mark. *Paintings and sketches.
The French heir apparent was called
"Dauphin" as a mark of respect. (Progressively mysterious)

But who has actually--
known anything about x them? *Filmx clips of dolphins at sea

FADE TO BLACK

(Music)

Fade in: under green water. A dolphin swims by. More appear, swimming around.

(Male narrator:)
These are dolphins in deep water. Actually you see them here in a very large tank. Beginning in the late nineteen-thirties, the big salt-water aquarium-- or "oceanarium," as it is called-- has developed as a place where colonies of dolphins, and sometimes bigger whales, can be kept alive and healthy.

Mother and baby swim by.

The calf swims right beside its mother for the first year or so of life. Remember, the dolphin is a cetacean, the cetacean is a mammal. Its young are born alive; the baby drinks milk from the body of its mother; and to breathe air, it must rise to the surface of the water, at least every three minutes, throughout its life.

Miscellaneous oceanarium shots, but with mother & baby recurrent.

(Female narrator:)
Quite a few dolphins have been born in captivity. The babies are born in the water; there is a brief cloud of blood when the umbilical snaps, but other dolphins stand guard to keep the sharks away. The baby then swims to the surface for its first breath of air, and drinks its first milk a few minutes later. They don't begin eating fish for a year, and even then may not like it at first.

At these places they often call them porpoises. That's because they don't want them confused with dolphin fish. But who could confuse these beautiful animals with fish? Scientists reserve the term "porpoise" for certain smaller cetaceans, who lack the dolphin's long beak.

Swimming and pranks.

(Male narrator:)

Don't call it a nose. The nose is on top of the head.
(Female narrator:)
Of the hundred-odd species of cetaceans, *five or six are porpoises, and some *two dozen are called dolphins. Even the names of the different dolphin species are beautiful. Stenella. Delphinus. Lagenorhyncus.
The kind you see here, who do best in captivity, are tursiops truncatus, the bottlenosed dolphin. These are seashore dolphins that live in temperate coastal waters around the world.

(Male narrator:)
Remember, an oceanarium is mainly commercial. Customers watch through portholes as the dolphins play with turtles, or go about their business -- swimming and breathing at the surface.
These oceanaria generally have sideshows where the dolphins do tricks. Jumping out of water to be fed, for instance. This is hardly something they do in the wild. (Two bars of circus music, ending in splash.)

(Two more bars of circus music, splash again.)

Try it yourself. Can you swim fast enough to jump clear of the water?

Fifteen feet out of the water?
(Circus music slowed down)
This animal weighs about *350 pounds. (Splash sound, loud, slowed down.)

The dolphin can also--

Gawking rubbernecker s.

Dolphin nips at turtle.

We see tails of dolphins at the surface.

Dolphin leaps from water (low jump, Theater-of-the-Sea)

Dolphin leaps from water (Seaquarium)

Dolphin leaps from water (Marineland high jump)

High jump in slow motion (Seaquarium)

Tail-running to catch fish

walk on the water, if necessary.
(First two bars of circus tune, ending in splash. Pause.)

Same

(Second two bars, ending in splash.)

Same

(Fifth bar repeats on tape loop, ~~fades~~ ~~fades~~ fades.)

Bobbing up and down (Theater-of-the-Sea)

(Female narrator:)
Here at Theater-of-the-Sea they have learned to bob up and down for tourists, much like a dog that sits up and begs.
And in these small pools you can meet them first-hand.
Still, anything you give them they may throw away.

Kenny's small pool, Theater-of-the-Sea
JCL hands football to Kenny.
Dolphin throws it away.

(Male narrator:)
Here, at Marineland, the first of the oceanaria, you see some of the fancier stunts these animals have been persuaded to do for onlookers.
Their coordination is enormous.
Next time you leap clear of the water, tryk grabbing a bell-rope with your teeth.

Marineland tricks (hoops etc.)

Bell-ringing trick

They can be persuaded to do their tricks on cues from strangers, although they are pretty shy at first.
(Music and splashing.)

Charles Lilly gets animal to do tricks.

This man has his own dolphins.
It's not too impractical, provided you have your own fenced-in neck of the ocean, and can spare twenty pounds of fish a day for each.

Bald man with his own dolphins.

Same location; they bob and show teeth

Fierce-looking, aren't they. But no dolphin has ever hurt a human, except under great provocation, and on occasion dolphins have rescued drowning swimmers.

	(Nassau, on location with "Flipper.")
Wherever these animals have been ~~xxxx~~ confined, the humans dealing with~~t~~ them have found them both personable and very deliberate.	A dolphin swims to~~m~~ a brown hat and retrieves it, tossing it to a human.)
	(From same material.) Small boy sits in boat. Boat begins to move.
(Music)	Lovely shots of dolphin towing boat around.
	Boy and dolphin swimming (same material.) Dolphin pulls him around. Boy kisses dolphin. Dolphin rolls
(Female narrator:)	over in his arms.
But what do we know about them?	STOP MOTION AND FADE

(Male ~~xxxx~~ narrator:)
Science is the process of finding out.
But scientific research does not just happen. Systematic research on the mind of the dolphin began in 1955 when Dr. John C. Lilly organized a group of scientists-- neuroanatomists and brain surgeons-- to investigate some of the capacities of these animals.

(SWITCH TO BLACK-AND-WHITE)
We ~~xxx~~ see blowhole and eye of a dolphin.

Dr. Rose. Dr. Mountcastle. Dr. Kruger. Dr. Woolsey. Dr. Hind. Dr. Pribram. Dr. Malis. And Dr. Lilly. These are the actual films of that work. Let Dr. Lilly tell it.

Marineland exterior

(Dr. Lilly:)
We came from all over the country, not knowing what we would find but with the strong hunch that there was something to look for. Marineland put five of their animals at our disposal. See how passive they become when it's useless to struggle.

Catching of dolphins

Animal in sling, lookingx arbund with bright eyes.

The idea was to collaberate in producing a "brain map"-- something we already have done with many other species. This is an investigation we can carry on with an animal that does not require killing it.

Dolphin readied on table

In ~~mk~~ order for it not to feel pain while we were testing its brain, we gave it an anesthetic injection. And that was the first lesson we learned on that trip. You cannot give anesthetic to a whale. This injection caused the animal to stop breathing.

Injection given

We see the doctors become agitated (shot at 16 fps and not stretched.)

He could not be revived. We thought it was ~~an~~ accident.

We ~~knew~~ humans, monkeys, rats, cats and dogs. But we did not know cetaceans. And so, one after ~~the~~ another, even as we lowered the dosage, four of these animals died accidentally.

Stop motion closeups of the doctors, abstracted from the above.

BLACKOUT

But something else was learned from these experiments. We learned something about the brains of these dolphins, now studied fresh for the first time.

*FADE IN DRAMATIC BRAIN SHOT, color again

For years we scientists had known that the brains of many cetaceans were bigger than the human. We thought we had it on reliable authority, though, that they weren't as well packed, as full of neurons as our own. We thought we could laugh off the size.

*Brain being hefted, turned, in rubber gloves

*VCU pan over surface; gyri, sulci

*Cerebellum; medulla

(Sinister music)
But now we saw the fresh ones.
This is the brain of a dolphin.

*Dr. Lilly examining brain. Composed in such a way that dolphin brain-size can be compared with human head.

(Dr. Lilly continues, with lip synch.)
This brain is just as dense, as tightly connected a computing mechanism as our own.

Of course ~~there~~ there are a lot of differences. They don't seem to have our frontal lobes.

*Gestures toward own forehead and corresponding area on dolphin brain.

But they have things we don't have. A much bigger motor cortex. And thirteen thalamic nuclei instead of twelve. Their

brains are as big and full as ours.
This leads to some interesting conjectures, doesn't it.

*CU JCL.

(Music & Voice of JCL continues.)

Dissolve to Elvar, inscrutable in plexiglas tank. Miscellaneous closeups of dolphins looking up at camera.

Because suddenly these problems took on a new urgency for me, I decided it was time to do research on these animals in a big way: feet first, full time.

First I spent a couple of winters at Marineland, studying the tursiops brain, testing the animal's responses to electrical stimuli. (Sounds of miscellaneous buzzing, hammering, dolphin whistling, oscillator signals.) One dolphin learned how to turn on a pleasure-giving electric current in his brain on one trial. That's pretty good for a non-human. (Buzz, bell, splash, tweets.) It takes a rhesus monkey 40 or50. I realized the problem might not just be one of studying the passive animals but of trying to communicate with them.

MONTAGE OF COLOR STILLS. Sleeve guides, CUU of JCL, dolphins.)

CUU dolphin, apparatus.

(Music)

*Apparatus label: COMMUNICATION RESEARCH INSTITUTE.

I decided it was time to have a whole institute just for Delphinology-- the study of dolphins. Not because dolphins are more interesting than other whales, of course, but the bigger cetaceans just aren't handy to have around.

* Stencilled sign: COMMUNICATION RESEARCH INSTITUTE.

*Letterhead in typewriter. Typewriter types a date in 1960.

*Lightplane taking off.

(Return to male narrator.)
Here, on the island of St.Thomas, in the tropical Virgin Islands, Dr. Lilly found a perfect location for his laboratory. With the help of the National Science Foundation, and suggestions from all parts

St. Thomas facility, from above, and a-building.

of the scientific community, Dr. Lilly's laboratory ~~bgx~~ began to go up.

The pool, its central fixture, was blasted ~~sx~~ out of rock by the U.S. Navy.

(Dr. Lilly:)

It was with great excitement that we got ready to inaugurate our new pool, and see how dolphins would get along in it. Here is my wife Lis with dolphin carrying cases that we built.

Mrs. Lilly with carrying case (indoor)
Same (outdoor)

Here they are catching the animals for us at Marineland.

Animals being removed.

(Music. One roaring motor fades into another one.)

Fork-lift into plane

JC & Mrs. Lilly waving goodbye

~~Exterior~~
Fork-lift brings box to edge of pool

(Happy arrival music)

Animals released into pools

Unfortunately these animals were not well when we got them. Here we are using a parachute to capture Baby and give her an antibiotic shot.

Dr. Lilly injects Baby
Parachute capture

See how she hides under the surface and stirs up the mud.

Hides and stirs up mud. She disappears under surface.

The medical treatment was too little and too late. Within a few weeks both animals were dead.

Short shot of one ofk the animals dead, floating belly up.

(Male announcer:)
Before trying out any more animals at St. Thomas, then, Dr. Lilly and his staff headed back to Florida and set up temporary headquarters where they could get the hang of keeping dolphins alive.

Wave ramp & pictures of empty pool

Dissolve to Dinner Key outdoor pools

(Dr. Lilly:)
Here we kept two young tursiops named Elvar and Tolva-- a boy and a girl.

We readied a laboratory there, and brought them in.

Readying Miami lab (interior)

(Music.)
(Music. Low roars and clanks.)
Now, at least, this would be a beginning while the St. Thomas lab was readied for full-scale operation.

Carrying-case and fork-lift shots

Tolva explored every inch of the new tanks.

Tolva poking around plex. tank, ducking back to pool

But both she and Elvar took quite well to living in small spaces indoors.

Animals splashing around

Young Elvar learned quickly. In less than a week in captivity, he was doing simple tricks, retrieving toys for humans in return for a brushing.

Dissolve to: Elvar doing tricks for a brushing

This is a girl dolphin named Sissy. She likes to rock her water. Perhaps it reminds her of waves in the ocean.

Sissy rocks to make waves.

Sissy swims around pool. After a circuit, she arrives at edge and hoists herself over it on flippers.

(Alice:) Hello, Elvar. Come here, pretty baby. (Sound track attributes blats to Elvar.)

Elvar, confined for surgery, makes repeated attacking gestures toward Alice. In context they can be made to appear friendly. His open jaws show.
CU same.

(Male narrator:)
They have up to a hundred pointy teeth, with matching sockets in their jaws. Their lips are stiff.

Here is Elvar in the sun. Note the breadth of the fluke, rigid from tip to tip on the leading edge, but flexible on the tapering side. The spot behind the eye is the ear. Their hearing is impressive, and, like their sounds, extends far above ranges that human beings can hear unaided. The single earbone in each side of the head changes its orientation in somewhat the same way our own eyeballs move. The skin of the dolphin feels about like a wet innertube. They like being petted. Some dolphins have whiskers on the beak, much like a rat or cat, but the adult tursiops does not, though there are speckles where the infant had them.

Elvar in plexiglas tank, Dinner Key

Various shots of him

Stroked by hand.

See the crescent-shaped blowhole, which closes toward the rear when the animal relaxes the muscles ahead of it. A whole breath takes about *a fifth of a second and exchanges about *a gallon of air.

Fade from full shot

This skeleton will help you understand their structure. There is nothing fishy about this skeleton, that of a young tursiops. Its skeleton is more or less like that of all whales.

Skeleton.

They have lost nearly all trace of the typical mammal's legbones and pelvis. Over millions of years in the water they have become superlative swimming engines, but in the layout of their internal organs and the basic 'decisions' of biological design, they are mammals all the way.

(Dr. Lilly)
This was an Old Bull tursiops who taught us about the dolphin eye. See the shape of the iris: it has a curtain that comes down in the center when the light is bright. Note that the curtain bulges out, ~~so that the light c~~

MS of bull, as at opening.

CUU eye.

so that the light entering from above finds only a slit; yet there is a wide aperture for light coming from the dimmer waters below.

We also found out that they could move their eyes separately with no apparent strain. They often watch two different things at once. This is probably related to something else we found out at the Communication Research Institute: that different sides of the dolphin's brain sleep at different times.

*Any stk clips from this research

(Creepy music)

But these were not the only surprises waiting to be discovered. We had heard many sounds from the dolphins. Here now in the laboratory was the instrumentation -- high-powered electronic recorders and analyzers -- that could pick up the voice of the dolphin with fidelity, in and out of water.

Oscilloscope pattern flashing.

Instruments

CU dolphin playing with hydrophone

Now we heard the sounds in full. (Up sounds, the works: blats and buzzings, squawks and squeals.) And the sounds were wondrous. All the sounds you hear were actually made by dolphins of the species tursiops.

Sonograph cranking out sonograms

Elvar flexing himself, tooting

CU sonogram

(Male announcer:)
They gesture with their mouths, but that is independent of their sound production.

Mouth opening independently.

(The sounds fade but continue.)
There are at least two separate vocal organs within the dolphin head, although not been aboe to find out yet where they are. (Dolphin whistles.) Besides which, they can whistle, and maneuver in the dark by their own reflected sonar buzzing. Skeptics say there is no reason to suppose they have a true language.

Dolphin CUU

Blowhole twitching

Low-key underwaters shots

Elvar & Cheechee swimming around.

(Dr. Lilly:)
But neither is there any reason at all
to claim that they don't.

Miscellaneous several-dolphin indoor pool shots.

(Male announcer:)
What we want now is <u>evidence</u>.

(Dr. Lilly:)
And that's what we're collecting.

(Female announcer:)
But without any Rosetta stone--

(Dr. Lilly:)
It's a matter of months and years.

(Dolphin sounds recur.) Male announcer:)
From the Miami Lab have come publications analyzing some of the complexities of the sounds they make with one another.
Breakdowns of their interchanges of sound indicate that although their noises come in bursts too fast for the human ear to distinguish, they do not seem to interrupt ~~xxxxx~~ one another.
(A "conversation" is heard through this.)
Dr. Lilly and ~~hisx~~ associates have also found that dolphins can be taught to imitate human speech.

Elvar and Cheechee: lolling or moderately active

*Alice holds out fish for Elvar.

(Alice:) One, Elvar.
(Elvar:) One. *(He gets and eats fish.)

They have to be bribed a little, though.
(Alice:) ~~(illegible)~~
(~~illegible~~) Two.
(Elvar:) Two. ''''''''''

Aristotle said that dolphins~~xxxx~~ could pronounce vowels very well.

(Alice:) Three.
(Elvar:) Ee. ''''''''''

But he noted that they have trouble with consonants.

(Alice:) Four.
(Elvar:) Aw. """""""

Sometimes you won't find this passage, though. Zealous editors often take it out to prevent Aristotle from looking silly.

Changes of angle, getting closer to Elvar and leaving Alice out, as we go through the numbers.

(Alice:) Five.
(Elvar:) Five. (Cut to next shot without reward.)
(Music is rising.)
(Alice:) Six.
(Elvar:) Six seven. (He eats.)

Dolphins are enthusiastic.

(Alice:) Eight, Elvar.
(Elvar:) Eight.

CU Elvar.

(Elvar:) Nine.

VCU Elvar.

(Elvar:) Ten.
(Music up.)

We look at Elvar while hex eats, looking at camera.

FADE

From time to time the Institute staff has to go dolphin hunting. This may look like a picnic to you, but in fact it's an intricate business.

Dolphin hunt. People wear funny straw hats, etc.
*CU people searching horizon, pointing, steering
*CUU of everybody's face at moment of throwing nets

Your net must encircle them completely, for with their sonar they immediately find any hole and escape. Still, for some reason they don't jump over, which they could easily do.

The encirclement maneuver. We see dorsal fins encircled.

But you must be very careful that none are caught in the net underwater. For they will drown.

And you must be careful, bringing them
inboard, not to bend them too suddenly, Closing in
for their tails take on a permanent bend.

(Dr. Lilly:) Man wades in water to catch Baby D.
Here was a little one we called
Baby D. We caught her but not her
mother. (Whistling trains.) Man carries Baby D out of water.
Here she is being handded for the
*first time. She was about the
most lovable dolphin we ever had.
Dolphin packed into Cadillac
Taking care to keep her skin moist,
we packed her off ~~in~~ to the lab.

A dolphin out of water smells a little
fishy and a little doggy. We did not
keep this car very long after that.
Car drives away
(Female announcer:)
But when she got to the laboratory,
it became apparent that she was not
yet weaned. Baby D refuses fish.

She wouldn't touch fish.

She ignored a hose full of milk. Ignores milk.

(Male announcer:) We couldn't keep
her very long at that rate. We tried
putting milk in a rubber glove.

(Female announcer:) But still she
wouldn't take it-- Baby D hesitates over glove

(Music~~:~~ Gentle, swelling.) Accepts milk!

After that, whenever she wanted
milk she would call us by knocking
on the side of the tank with her
flipper.
Like any baby dolphin, she banged
up her chin from time to time. ~~Her~~ Drinking milk with banged chin.

(Male announcer.) Finally we lost her,
from not having ~~the~~ right formula.
But all the time we were learning. Baby D dead (fades fast.)

Today the oldest inmates at the Communication Research Institute are Elvar and Cheechee. To get their attention for research we have to separate them. However, we kept finding them together when they'd been put apart. Only by spying did we discover that Elvar had learned to open the partition, wriggle through, and close it so we wouldn't find out.

Elvar and Cheechee in separate tanks.

Elvar and Cheechee together.

Partition begins to rise

He wriggles through
He closes it.

(Music. Splashing.)

They swim around. Shots from above and underwater. "Little red flag" is seen just enough for information, not enough for censorship or big laugh.

Like any other mammals, dolphins like to snuggle. And like other mammals, they don't like to be bothered. They have enormous belly buttons.

Snuggling

Cheechee squirts polyethylene curtain.

Somersault demonstrates navel.

Keeping dolphins in laboratories, while it can be fun, is no casual matter. This is one of the reasons that visiting scientists can contribute so much. So much time and effort is needed just to keep a laboratory going.

*Dr. Morgane sketches brain

*Dr. Schiller conditioning Elvar

You can stack 400 research rats or 20 research monkeys up against one wall. But these animals need running water in profusion.

They become sick in many different ways. This little dolphin has something roughly corresponding to our measles. Curiously, though, the sores are rectangular. He looks as though he's been covered with postage stamps.

Baby with erysipelas, swimming around with Mother

He is caught

Here the men are taking his temperature to find out whether he's getting any worse. The normal temperature of a dolphin--- under the insulating blubber-- is 98.6.

Taking temperature.

They must get 30 pounds of fish-- preferably butterfish-- from you each day, and learn to eat them dead, rather than alive from the ocean.

Feeding at St. Thomas lab: from raft

And you, in turn, can use this feeding as an opportunity to get close to them. See the gesture with the head, asking to be fed without having to come near you.

Feeding from the shore

But they learn to approach.

Mark squatting on little bench in pool, feeding Mother and Baby.

And, while in a laboratory it is hard to get as close to them as you can to a pet, a great deal of camaraderie can be achieved.

George holds hoop, Baby goes through

Their mischievousness is not a constant joy.

Willie trying to clean pool. Cheechee squirts him again and again.

But whenever you are near these animals, you cannot help being aware of their presence as personalities.

Elvar and Cheechee; Sissy and Chuck; Mother and Baby.

Elvar is watching you. Be careful if you want to stay dry. Here Cheechee is swimming with someone who is a stranger to her.

Elvar in plexiglas tank, watching you

(Music has been sneaking in, now rises.)

This is the grey dolphin tursiops, in the lab.

Cheechee with man from United Aircraft

Sissy swims around; hoists onto side and looks at camera.

There are many other interesting things happening between man and dolphin, though.

This is perhaps the most famous living dolphin, Snowball, caught off the Carolinas by Miami's Seaquarium, where you see her. Despite her unusual coloring-- not pinkish-white with red eyes, like albinos of other species-- she

Snowball and offspring

appears to be a normal tursiops,
like the baby caught with her,
who never leaves hers side.

Of all things we have found to interest a dolphin, the most fascinating is toes.
(Splash, gasps, soft quackings.)

Gingers and Alice dabble toes in water, are approached by Snowball and calf.

(Female announcer.)
This is one of the little dolphins of the Amazon River, Inia Geoffrensis. It is one of fivwe species of fresh-water dolphin scattered about the world. They are called "primitive" in type because their type is no longer found in the ocean. This one liked to swim upside down.
Their body plan and style of adaptatin evidently could not compete in the changing seas.
(Tender music.)

Inia

Inia floats away, tummy up

Man and dolphin-- especially dolphins and little boys-- have had a special kind of friendship for thousands of years.

Little boys and dolphins.

Chasing. Holding and kissing.

So in a way there is nothing new about whatm science is doing now. The electronics and high-speed photography are new, of course; som are the pumps and the antibiotics. But the relationship is very, very old.
(Swirl of music.)

One little boy kisses one little dolphin.

With practice we can get close. People love to play with dolphins; and dolphins love to push people around.
They are as curious about the world as we. Look at Sissy, looking around.
K This posture may be the reason tursiops is called "bottle-nosed."

Sissy pushes Sandy by armpit

(From same sequence:) Sissy sticks head straight mk out.

(Male announcer:)
How smart are they? Can you tell?
The fact that their brains-- and those of the larger whales-- are so much bigger than ours leads tom some awesome

More affectionate swimming

Overhead shots

questions. Can you discuss nuclear physics with a dolphin, as has happened in science-fiction? Well, how many people have you discussed nuclear physics with? Lately, that is.

When ~~xx~~ we meet intelligent creatures in outer space-- a century from now or next year-- will we ~~knowx~~ how to speak to them? Can we learn, fast enough, so we can say, "We want to be friends"-- in time?

We ~~xxxxxxx~~ are practicing here on earth.

*The dry room of the lab. Ginger is at her tapes, JCL is pottering with the electronics.

x(All at once a great and varied racket ~~x~~ is heard from the animals.)

*Shot of oscilloscope screen, jiggling in synch with the sound. JCL beckons to assistants, who come and stand beside him to look at it.

Quick studies of their faces-- sober but dedicated, eagerly perplexed at this new thing. MSS of all of them, one by one, looking at this new thing. Behind them we see the bay through the window.

A shot of the bay, through window, over shoulders. Then successive telepheto shots past them into the bay. Now pictures of the water.

Finish on shot of just water, with beams of light coming out of clouds from sun. Telephoto of sun, clouds and sea (double printed.) Sea fades into light.

(Music up, pauses; dolphin sounds up, pause; both knit in music's end.)

Fade out, no title.